

General

Guideline Title

Maintaining a healthy weight and preventing excess weight gain among adults and children.

Bibliographic Source(s)

National Institute for Health and Care Excellence (NICE). Maintaining a healthy weight and preventing excess weight gain among adults and children. London (UK): National Institute for Health and Care Excellence (NICE); 2015 Mar 13. 55 p. (NICE guideline; no. 7).

Guideline Status

This is the current release of the guideline.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Recommendations

Major Recommendations

Note from the National Guideline Clearinghouse (NGC): This guideline was developed by the Public Health Advisory Committee (PHAC) on behalf of the National Institute for Health and Care Excellence (NICE). The guideline replaces section 1.1.1 of NICE's guideline on obesity , NICE guideline CG43 (2006).

Who Should Take Action

All those who provide information to help different population groups maintain a healthy weight or prevent excess weight gain. This includes practitioners providing information or advice to children and adults in primary care, community based settings, early years settings, schools and workplaces. The guideline is also aimed at everyone who commissions, designs, implements or evaluates activities and interventions that directly or indirectly help these population groups.

Read this guideline in conjunction with other NICE guidance (see Section 5, "Related NICE guidance," in the original guideline document) for recommendations on effective activities and interventions. This includes how to tailor activities and information for specific groups, such as for people with disabilities or from different age, gender, socioeconomic, or ethnic groups.

- 1. Encourage People to Make Changes in Line with Existing Advice *Encourage Everyone to*:
 - Establish and maintain a combination of increased physical activity and healthier dietary habits to achieve and maintain energy balance (see recommendations 2 and 3 below).

reduce the risk of diseases associated with excess weight. (For existing advice on physical activity see NHS Choices
.)
• Follow existing advice on healthy eating because it will make it easier to have an appropriate energy intake. (For existing advice on
healthy eating see NHS Choices
• Avoid extreme physical activity or dietary behaviours (such as obsessively exercising or aiming to avoid all carbohydrates) because
they are difficult to sustain and may not be accompanied by wider improvements in health.
• Identify perceptions, habits or situations that may undermine efforts to maintain a healthy weight or prevent excess weight gain in the
long term, and offer practical examples of helpful alternatives. These may include:
 Drinking water instead of drinks containing free sugars (including sports drinks) while being physically active
 Not overestimating how much physical activity is being done
 Avoiding overeating after being physically active

• Follow existing advice on the recommended level of physical activity because it is likely to help increase energy expenditure and

- the school summer holiday)Avoiding giving 'sweet treats' as a reward or giving them regularly as gifts
- Checking food and drink labels as a guide to appropriate portion sizes
- Being aware that even food and drinks perceived as 'healthy' (such as olive oil, fruit juice, nuts) can contribute to weight gain if large amounts are consumed

Maintaining healthier physical activity and dietary habits most days (including at weekends) and during holidays (for example,

- 2. Encourage Physical Activity Habits to Avoid Low Energy Expenditure Encourage people to be more physically active and to reduce sedentary behaviour. Encourage people to build activity into daily life, developing routines and habits that gradually increase the amount and intensity of activity they do. This may include:
 - Increasing regular walking, particularly brisk walking, or cycling as a form of active travel (to school, work or other local destinations). (See NICE's guideline on walking and cycling ______.)
 - Increasing activities during leisure time and breaks at work or school (including some periods of moderate-to-vigorous physical
 activity). This could include any form of physical activity, sport or exercise such as walking, cycling, swimming, dancing or gardening.
 - Increasing activity as part of daily routines (such as taking regular breaks from sitting at home or work, and taking the stairs instead of the lift).
 - Reducing TV viewing and other screen time. Advise people that any strategy that reduces TV viewing and other leisure screen time may be helpful (such as TV-free days or setting a limit to watch TV for no more than 2 hours a day).
- 3. Encourage Dietary Habits That Reduce the Risk of Excess Energy Intake
 Encourage everyone to follow a dietary pattern that is mainly based on vegetables, fruits, beans and pulses, wholegrains and fish. In addition, everyone should be encouraged to:
 - Reduce the overall energy density of the diet. Practical ways to achieve this may include:
 - Reducing how often energy dense foods and drinks (such as fried foods, biscuits, savoury snacks, confectionery and drinks
 made with full fat milk or cream) are eaten
 - Substituting energy dense items with foods and drinks with a lower energy density (such as fruit and vegetables or water)
 - Using food and drink labels to choose options lower in fat and sugar
 - Choosing smaller portions or avoiding additional servings of energy dense foods
 - Limit consumption of energy dense food and drinks prepared outside the home, particularly 'fast' or 'takeaway' foods.
 - Avoid sugary drinks (including carbonated drinks, sports drinks, squashes and any other drinks that contain free sugars). Everyone
 should be encouraged to choose water or other drinks that do not contain free sugars. Other suitable drinks may include coffee, tea
 or drinks containing non-nutritive sweeteners, such as 'diet' versions of carbonated drinks or squashes.
 - Reduce total fat intake. Practical ways of doing this may include choosing lower fat options of the main sources of fat in the diet, reducing portion size or frequency of consumption of foods high in fat (such as meat and meat products, milk and dairy products, fats and oils, and baked foods such as pizza, biscuits and cakes).
 - Eat breakfast but do not increase overall daily energy intake. Breakfast choices should reflect existing healthy eating advice (see recommendation 1 above). Practical ways to achieve this may include opting for unsweetened wholegrain cereals or bread, lower fat milk and a portion of fruit.
 - Increase the proportion of high fibre or wholegrain foods eaten. Practical ways to do this may include:
 - Choosing wholemeal bread and pasta and wholegrain rice instead of 'white' versions
 - Opting for higher-fibre foods (such as oats, fruit and vegetables, beans, peas and lentils) in place of food and drinks high in fat or sugar
 - Limit intake of meat and meat products. Follow existing advice from NHS Choices to eat no more than 70

g of red and processed meat a day on average. Practical ways to do this may include reducing the portion size of meat or how often meals including meat are eaten.

	In addition to the advice in recommendations 1, 2, and 3 above, encourage parents, carers and everyone in regular contact with children
	and young people to:
	• Encourage and support them to be active at every opportunity (such as active play, travel, sport or leisure activities). (See NHS
	Choices and NICE's guideline on promoting physical activity for children and young people
	.)
	Eat meals with children and young people.
	• Help children and encourage young people to get enough sleep. Explain to parents and carers that this is because lack of sleep may
	increase the risk of excess weight gain in children and young people. Provide parents and carers with information on age-specific
	recommendations on sleep (for more information, see NHS Choices).
5.	Encourage Adults to Limit the Amount of Alcohol They Drink
	 Adults should not exceed recommended levels of alcohol consumption.
	• Advise adults that all alcoholic drinks are a source of additional energy. For example, a man drinking the upper daily limit of 3-4 units
	will be consuming around 200-325 extra calories a day and a woman drinking the upper daily limit of 2-3 units will be consuming
	around 140-260 extra calories a day. Practical ways to limit alcohol consumption may include replacing alcoholic drinks with non-
	alcoholic drinks that do not contain free sugars (see recommendation 3) and increasing the number of alcohol-free days. For more
	information see advice on drinking alcohol on the NHS Choices Web site.
6.	Encourage Self-Monitoring
	• Encourage habits that may help people to monitor their weight or associated behaviours. Practical examples for adults to do this may
	include:
	 Checking their weight regularly, for example weighing themselves once a week. (See recommendation 7 in Behaviour Change:
	Individual Approaches below.)
	• Checking their physical activity level (for example, by noting down activities, or using a pedometer or an app to track physical
	activity). (See recommendation 7 in NICE's guideline on walking and cycling
	• Checking their food and drink intake (for example, by noting down meals and snacks, using an app to track intake, or
	checking food and drink labels). For apps that may be helpful, see NHS Choices.
	Provide sources of accurate information (such as NHS Choices) and details of local services to people who
	have any concerns about their - or their family's - diet, activity levels or weight. For more information about raising awareness of
	local services see NICE's guidelines on managing overweight and obesity in adults: lifestyle weight management
	and managing overweight in children and young people: lifestyle weight management services
7.	Clearly Communicate the Benefits of Maintaining a Healthy Weight
	Clearly communicate the broad range of benefits of maintaining a healthy weight through being more physically active and improving dietary
	habits. These should include 'non health' benefits as well as improvements to health. For example:

• The enjoyment gained from shared, social physical activities

4. Further Advice for Parents and Carers of Children and Young People

- The reduced risk of developing diseases associated with excess weight such as coronary heart disease, hypertension, liver disease, osteoarthritis, stroke, type 2 diabetes and some cancers
- Improved mental well-being
- · Reduced breathlessness, improved fitness and other benefits from increased physical activity that are independent of weight
- Lower blood cholesterol, improved oral health and other benefits from improved dietary habits that are independent of weight
- 8. Clearly Communicate the Benefits of Gradual Improvements to Physical Activity and Dietary Habits

Clearly communicate that even small, gradual improvements to physical activity and dietary habits are likely to be helpful. Emphasise that:

- Improving dietary habits and being physically active are as important for people who are currently a healthy weight as for people who are already overweight.
- Weight gain in adulthood is not inevitable. It is possible to avoid gaining weight with age by being physically active and eating a diet based on foods and drinks with a lower energy density.
- No single physical activity, food or drink will maintain a healthy weight a combination of actions is needed.
- 9. Tailor Messages for Specific Groups

Tailor messages (for example, for different age, socioeconomic or ethnic groups or for people with disabilities). Ensure all messages are

	clear, consistent, specific and non-judgemental. For more information see recommendation 5 in NICE's guideline on obesity: working with
	local communities and recommendation 6 in NICE's guideline on preventing type 2 diabetes: population and
	community-level interventions
	Ensure Activities Are Integrated with the Local Strategic Approach to Obesity Ensure that any activities promoting behaviours that may help people maintain a healthy weight or prevent excess weight gain are integrated with the local strategic approach to obesity (see recommendation 1 in NICE's guideline on obesity: working with local communities Output Description:
	 Address both physical activity and diet (see recommendation 1 above).
	 Use effective methods for encouraging and enabling behaviour change (see NICE's guideline on behaviour change: individual
	approaches).
	 Target and tailor activities, using local knowledge (such as the Joint Strategic Needs Assessment or local surveys), to meet the need of the population, recognising that some groups may need more support than others (for example, see recommendation 3 in NICE's
	guideline on walking and cycling and recommendation 2 in NICE's guideline on preventing type 2 diabetes
	population and community-level interventions
Clin	ical Algorithm(s)
A Nati	ional Institute for Health and Care Excellence (NICE) pathway titled "Obesity Overview" is available on the NICE Web site
Scc	ppe
Dise	ease/Condition(s)
•	Weight gain
	Overweight
•	Obesity
Gui	deline Category
Counse	eling
Preven	ntion
Risk A	assessment
Clin	ical Specialty
Family	Practice
Interna	al Medicine
Nursin	g
Nutritio	on
Pediati	ries

Preventive Medicine

Health Plans Hospitals Managed Care Organizations Nurses Patients Physician Assistants Physicians Public Health Departments Social Workers Students Guideline Objective(s) To provide recommendations on behaviours that may help people maintain a healthy weight or prevent excess weight gain

Interventions and Practices Considered

1. Encouraging people to make lifestyle choices in line with existing advice (i.e., combination of increased physical activity and healthier dietary habits)

Note: The guideline does not cover the particular needs of women during pregnancy or people who have conditions that increase their risk of being

- 2. Encouraging physical activity habits to avoid low energy expenditures (e.g., increased walking and cycling, reduced TV viewing and other screen time)
- 3. Encouraging dietary habits that reduce risk of excess energy intake
- 4. Advice for parents and carers of children and young people
- 5. Encouraging adults to limit the amount of alcohol they drink
- 6. Encouraging self-monitoring

Target Population

overweight or obese.

Children (after weaning) and adults

Intended Users

Allied Health Personnel

Health Care Providers

Dietitians

Advanced Practice Nurses

- 7. Clearly communicating the benefits of maintaining a healthy weight
- 8. Clearly communicating the benefits of gradual improvement in physical activity and dietary habits
- 9. Tailoring messages for specific groups (e.g., for different age, socioeconomic or ethnic groups or for people with disabilities)
- 10. Ensuring that activities are integrated with the local strategic approach to obesity

Major Outcomes Considered

- Weight
- Waist circumference
- Body mass index (BMI)
- Fat mass
- · Risk of obesity or overweight
- Improved mental well-being
- Active travel
- Reduction of visceral fat/% body fat
- Other non-weight outcomes such as mortality, cardiovascular disease, cancer risk, and diabetes
- Acceptability of messages about individually modifiable behaviours to help maintain a healthy weight or prevent excess weight gain

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Note from the National Guideline Clearinghouse (NGC): Two evidence reviews were performed by Bazian Ltd. to support the recommendations for this guideline (see the "Availability of Companion Documents" field).

Key Questions

The key questions were established as part of the scope. They formed the starting point for the reviews of evidence and were used by the Public Health Advisory Committee (PHAC) to help develop the recommendations. The overarching questions were:

- Question 1: What individually modifiable behaviours may help children and young people to maintain a healthy weight or prevent excess weight gain?
- Question 2: What individually modifiable behaviours may help adults to maintain a healthy weight or prevent excess weight gain?
- Question 3: What are the most effective ways to communicate information to children, young people and adults about individually modifiable behaviours to help maintain a healthy weight or prevent excess weight gain?

Reviewing the Evidence

Effectiveness Review

One review of effectiveness was conducted (Review 1): An evidence review of modifiable diet and physical activity components and associated behaviours (see the "Availability of Companion Documents" field).

Identifying the Evidence

Several databases were searched in November 2013 for systematic reviews from 2005. See Review 1 for details.

Key Web sites were also searched for reports produced by governments, academics and industry. In addition, several databases were searched for primary studies where gaps in the evidence had been identified by systematic reviews.

Selection Criteria

Studies were included in the effectiveness review if:

- They were high quality systematic reviews.
- They were undertaken among a general population.
- They considered the association between an individually modifiable behaviour and the maintenance of a healthy weight or the prevention of weight gain.
- They were published in English.

• They were primary studies that considered the association between a particular factor (meal planning, holiday weight gain and standing) and the maintenance of a healthy weight or the prevention of weight gain.

Because of the number of reviews meeting the inclusion criteria, reviews were prioritised for full consideration in the final evidence review based on the quality of the review, the publication date, the ability to address the factors being considered and the ability to add nuance to existing recommendations.

Studies were excluded if:

- The interventions were undertaken in a particular setting.
- They focused only on people who were overweight or obese with an associated medical condition.
- They were non-systematic reviews.

See Review 1 for details of the inclusion and exclusion criteria.

Other Reviews

One review of qualitative evidence was conducted (Review 2): *Qualitative evidence review of the most acceptable ways to communicate information about individually modifiable behaviours to help maintain a healthy weight or prevent excess weight gain* (see the "Availability of Companion Documents" field).

Identifying the Evidence

Several databases were searched in February 2014 for qualitative evidence published after 2000. See Review 2 for details.

Selection Criteria

Studies were included in the review if:

- They were primary UK-based qualitative studies.
- They were systematic reviews of qualitative studies (UK or non UK).
- They were full text articles published in English after the year 2000

Studies were excluded if:

- They did not address the questions outlined in the scope.
- They addressed the treatment of obesity or management of medical conditions related to weight status.

Number of Source Documents

Clinical Effectiveness

Evidence Review 1

In total, 4,934 studies were identified during the search (4,590 systematic reviews and 370 primary studies), and 80 studies (76 prioritised reviews and 4 primary studies) were included in the review. See Figure 3 in Review 1 for the flow of studies from search to inclusion (see the "Availability of Companion Documents" field).

Evidence Review 2

Seven UK primary studies and 2 non-UK systematic reviews were included in this review.

Cost-effectiveness

The National Institute for Health and Care Excellence (NICE) prepared a document on cost effectiveness considerations from a population modelling viewpoint instead of a review of economic evaluations and a modelling report.

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Quality Appraisal

Included systematic reviews were assessed for methodological rigour and quality using the National Institute for Health and Care Excellence
(NICE) systematic review checklist and the Critical Appraisal Skills Programme (CASP) systematic review quality checklist
Primary studies were assessed using the appropriate NICE checklist, as set out in Methods for the development of
NICE public health guidance Each study was graded (++, +, -) to reflect the risk of potential bias arising from its designment.
and execution.
Study Quality for Systematic Review
[++] All or most of the checklist criteria have been fulfilled. Where they have not been fulfilled, the conclusions are very unlikely to alter.
[+] Some of the checklist criteria have been fulfilled. Those criteria that have not been fulfilled or not adequately described are unlikely to alter the conclusions.
COLCUSIONS.
[-] Few or no checklist criteria have been fulfilled. The conclusions of the study are likely or very likely to alter.
The evidence was also assessed for its applicability to the areas (populations, settings, interventions) covered by the scope of the guideline. Each
evidence statement concludes with a statement of applicability (directly applicable, partially applicable, not applicable).
Study Quality for Primary Studies
The ratings are broadly as follows:
[++] All or most of the checklist criteria have been fulfilled, indicating a high quality study.
[+] Some of the checklist criteria have been fulfilled, indicating a moderate quality study.
[-] Few or no checklist criteria have been fulfilled, indicating a low quality study.

Methods Used to Analyze the Evidence

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

Note from the National Guideline Clearinghouse (NGC): Two evidence reviews were performed by Bazian Ltd. to support the recommendations for this guideline (see the "Availability of Companion Documents" field).

Evidence Review 1

Quality Assessment and Data Extraction

Quality assessment checklists (provided in Appendix D [see the "Availability of Companion Documents" field]) were used to rate studies as high [+++], moderate [++], or low [-] quality. For systematic reviews, this quality rating refers to the quality of the review itself, rather than the quality of the primary studies it includes.

Applicability to the UK was judged at review level, if the majority of studies were performed in Organisation for Economic Co-operation and Development (OECD) countries, reviews were judged to be applicable to the UK. If countries of the individual studies were not reported, applicability was rated as unclear.

Due to the large volume of reviews identified, where multiple reviews were identified for a single factor, the reviews were assessed and the highest quality, most up-to-date, and most relevant (i.e., best match for the scope) review(s) were selected for extraction. Match to the scope was assessed in the following areas, as these were the key areas in which reviews differed:

• Study design – reviews including some studies not matching the current review scope (e.g., cross sectional studies) were considered a partial match

- Population reviews including some studies not matching the current review scope (e.g., overweigh/obese people and/or people with specific conditions) were considered a partial match
- Setting reviews including some studies not matching the current review scope (e.g., school- or work-based studies) were considered a partial match

The aim was to have at least one review covering children and young people, and at least one review covering adults for each factor. Multiple reviews could be included for a factor if they covered differing pools of studies (e.g., different study designs or numbers of studies) and were of similar quality, date, and relevance. For reviews not prioritised for extraction, reasons were recorded (see Appendix E). Reviews generically addressing overweight and obesity prevention, rather than specific factors, were also de-prioritised and are listed in Appendix C.

Where reviews provided separate results and conclusions based on the different populations, settings, or outcomes, those most relevant to the current review (i.e., most closely matching the scope) were extracted. Because the majority of the reviews synthesised results of included studies narratively, adjustment for confounders was not carried out on a review-wide level. Reviews varied in their reporting of study-level adjustments (e.g., for total energy intake), and whether these were explicitly considered in the review conclusions. Adjustment for confounders has not been recorded on a study-by-study basis in the current review, but if noted as a limitation by authors of the individual reviews or reviewers this has been recorded in the evidence tables. Where adjustment for confounders was explicitly considered in the conclusions of the included reviews or if adjustment for confounding was noted by reviewers as potentially explaining patterns of results in included reviews, this has been discussed in the current summary.

Evidence Statements

Evidence statements were drafted in line with guidance from the NICE public health methods manual 2012, and feedback from the NICE project team. Draft evidence statements were discussed with the Public Health Advisory Committee and revised based on feedback received. The following general guidelines were used for the strength of evidence ratings:

- Strong evidence: Two or more reviews of good match to the current review scope, of which at least one should be of high quality, with most
 reviews finding a consistent and statistically significant direction of effect, with any non-significant effects heading in the same direction of
 effect as the significant effects.
- Moderate evidence: More than one review with at least one review of moderate quality, with some level of consistency, or one high quality review with some limitations (e.g., scope match, number of studies or participants).
- Weak evidence: Evidence from low quality review(s) only, or a moderate or high quality review(s) with considerable limitations (e.g., poor match to current review scope, small numbers of studies or participants).
- Inconclusive evidence: Reviews identified insufficient evidence to conclusively describe the strength and/or direction of the association.
- No evidence: No reviews identified that specifically addressed this factor and contained studies relevant to the scope of the current review.

If a range of effect sizes could not be provided, the size of the effect or correlation was indicated using the following guidelines:

- Large: increase/decrease in relative risk (RR), odds ratio (OR) or hazard ratio (HR) of >20% or effect size of ≥0.8
- Medium: increase/decrease in RR/OR/HR of 10-20% or more, effect size of 0.5 to 0.8
- Small: increase/decrease in in RR/OR/HR of <10%, effect size of <0.5

For other measures a judgment relating to the size of the effect was made on a case-by-case basis.

Evidence Review 2

Data Extraction and Quality Appraisal

Study data extraction and quality appraisal was carried out for all studies selected at full text using qualitative study quality checklists and evidence table templates as provided in the NICE methods manual (NICE 2012) (see the "Availability of Companion Documents" field; see also the "Rating Scheme for the Strength of the Evidence" field).

As the number of included studies was small (7 unique UK primary studies and 2 non-UK reviews) all were double quality appraised by a second analyst with disagreements resolved by consensus discussion.

The above criteria assessed the influence of unwanted methodological bias. A second rating process took place assessing relevance and aimed to assess the usefulness of the study findings within the review. It was based on whether the data was rich (depth and breadth of relevant findings), relevant to the UK, and relevant to the review question on message acceptability. Relevance assessment was completed at the same time as the quality assessment of bias using a single combined form.

Thematic Analysis and Synthesis

The focus of this work was on synthesising UK evidence that could inform the construction of acceptable messages about maintaining a healthy weight or preventing excess weight gain in terms of content aspects such as language and message framing.

Data extraction and analysis sought to identify newly emergent themes from the available literature.

Process of Identifying Themes

Using manifest content analysis 2 research analysts worked to identify themes in parallel reviewing half of the literature each, comparing and discussing emergent themes as they went to resolve unclear or overlapping themes. Emergent themes were logged in a communal theme tracker database, with brief description outlining each conceptual theme.

The method of data extraction and synthesis into conceptual themes followed the following process based on principles of grounded theory.

All included literature was first read to gain familiarity with the data. Line by line thematic coding was then employed to identify emergent patterns of text "themes" relating to discreet aspects of communication acceptability. Emergent theme titles were noted in a theme tracker database alongside a brief description to log, develop and track emergent patterns.

As opposed to data from the results section only, data from all sections of the studies was considered eligible for coding; so long as the text was clearly linked to or quoting the original data (e.g., from user or provider interview, focus groups or surveys), rather than speculative or tangential discussion.

Details of the text contributing to each emergent theme, including an illustrative quote where possible, were extracted into evidence tables. Note: the evidence tables presented in Appendix E, section 12 (see the "Availability of Companion Documents" field), are a shortened version of these, containing just the theme titles to aid presentation and readability.

The data was initially extracted as order 1 or order 2 data. In brief, order 1 data came from participant level information -likely to be found in the main results section describing what was found from focus groups or interviews. Order 2 data contained added interpretation from the study authors' themselves, such as the main conclusions of the study or added nuances apparent from the authors' synthesis of the data - likely to be in the discussion or conclusion sections. Second order data was included as the authors of the study are often closest to the data and can add significant insight and synthesis when describing their data that would otherwise be missed if extraction focused solely on order 1 findings.

Synthesis

The data synthesis utilised a broad meta-ethnography approach.

All the emergent themes (based on order 1 and order 2 data) and their short descriptions were recorded in a summary table and reviewed by 1 analyst to identify overlaps, synergies or commonalities. At this stage related themes were collapsed into each other, resulting in the final list of themes identified (see Section 4 in the review). For example, "children's future success" and "flexibility and choice" were initially identified as a unique themes but were later both collapsed into the theme "message framing".

The non-UK reviews followed the same process as the UK primary literature outlined above. Only review level conclusions and data (order 2) were extracted from these reviews. That is to say, we were focusing on the review level summary and synthesised data presented in the reviews, rather than trying to disentangle, or reverse engineer individual study findings from the existing synthesis. The primary studies included in the reviews were not reviewed at source.

Data Extraction of Two Related Department of Health Publications

Of special note was the data extraction relating to the Department of Health consumer insight summary report (Department of Health 2008). The consumer insight summary informed a second related publication 'A toolkit for developing local strategies' (Swanton 2008). This sought to summarise best practice guidance and contained a very relevant section on communication (Tool D10), based on the findings of consumer insight study above. For the purposes of the review, data was first extracted from the consumer insight report as it contained the more detailed findings and methodological information. Subsequently, the toolkit text was reviewed for any additional insight or interpretation of the same data. Results data from both sources were extracted into the same evidence table with data from the toolkit prefixed with "toolkit" to identify the source. In the final evidence tables (Appendix E Section 12 of Evidence Review 2), these have been merged and the prefix removed, as only the theme titles are presented for visual clarity.

Data Presentation

Results reporting follows the following structure:

- Conceptual theme heading
- Theme description
- Number and quality of studies contributing to the theme
- Narrative summary
- Evidence statement

Qualitative data relating to communication acceptability was initially described using a brief narrative for each individual study grouped by emergent conceptual theme (not displayed for presentation purposes). These descriptions were then used as the foundation for writing more summarised and synthesised narrative summaries, which subsequently acted as the basis for the evidence statements.

Methods Used to Formulate the Recommendations

Informal Consensus

Description of Methods Used to Formulate the Recommendations

How the Public Health Advisory Committee (PHAC) Formulated the Recommendations

At its meetings in April and June 2014, the PHAC considered the evidence, expert reports and cost effectiveness to determine:

- Whether there was sufficient evidence (in terms of strength and applicability) to form a judgement
- If relevant, whether (on balance) the evidence demonstrates that the intervention, programme or activity can be effective or is inconclusive
- If relevant, the typical size of effect
- Whether the evidence is applicable to the target groups and context covered by the guideline

The PHAC developed recommendations through informal consensus, based on the following criteria:

- Strength (type, quality, quantity and consistency) of the evidence
- The applicability of the evidence to the populations/settings referred to in the scope
- Effect size and potential impact on the target population's health
- Impact on inequalities in health between different groups of the population
- Equality and diversity legislation
- Ethical issues and social value judgements
- Cost effectiveness (for the National Health Service and other public sector organisations)
- Balance of harms and benefits
- Ease of implementation and any anticipated changes in practice

If evidence was lacking, the PHAC also considered whether a recommendation should only be implemented as part of a research programme.

If possible, recommendations were linked to evidence statements. Where a recommendation was inferred from the evidence, this was indicated by the reference 'IDE' (inference derived from the evidence).

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

The National Institute for Health and Care Excellence (NICE) prepared a document titled "Maintenance of a healthy weight and prevention of weight gain in children and adults: cost effectiveness considerations from a population modelling viewpoint" (see the "Availability of Companion Documents" field) instead of a review of economic evaluations and a modelling report. A modelling report was not considered necessary because the cost effectiveness of brief advice can be inferred from the estimates of cost effectiveness from previous modelling exercises on healthy weight, weight gain, overweight and obesity carried out for NICE in recent years.

Based on this previous work, the Committee concluded that the types of approaches suggested in this guideline are likely to be cost effective.

Method of Guideline Validation

External Peer Review

Internal Peer Review

Description of Method of Guideline Validation

The draft guideline, including the recommendations, was released for consultation in September 2014. At its meeting in November 2014, the Public Health Advisory Committee (PHAC) amended the guideline in light of comments from stakeholders and experts and the fieldwork. The guideline was signed off by the National Institute for Health and Care Excellence (NICE) Guidance Executive in February 2015.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

If possible, recommendations were linked to evidence statements. Where a recommendation was inferred from the evidence, this was indicated by the reference 'IDE' (inference derived from the evidence). Evidence statements from two reviews were provided by external contractors (see the "Availability of Companion Documents" field). Section 8 of the original guideline document lists how the evidence statements link to the recommendations and sets out a brief summary of findings from the economic analysis.

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

- Adoption of evidence-based behaviours and interventions may help people maintain a healthy weight or prevent excess weight gain.
- There is a broad range of benefits of maintaining a healthy weight through being more physically active and improving dietary habits. These include 'non health' benefits as well as improvements to health. For example:
 - The enjoyment gained from shared, social physical activities
 - The reduced risk of developing diseases associated with excess weight such as coronary heart disease, hypertension, liver disease, osteoarthritis, stroke, type 2 diabetes and some cancers
 - Improved mental well-being
 - · Reduced breathlessness, improved fitness and other benefits from increased physical activity that are independent of weight
 - · Lower blood cholesterol, improved oral health and other benefits from improved dietary habits that are independent of weight

Potential Harms

Body mass index (BMI) is a less accurate indicator of adiposity (whether someone is overweight or obese) in adults who are highly muscular, so it should be interpreted with caution in this group.

Qualifying Statements

Qualifying Statements

• This guideline represents the views of the Institute and was arrived at after careful consideration of the evidence available. Those working in

- the National Health Service (NHS), local authorities, the wider public, voluntary and community sectors and the private sector should take it into account when carrying out their professional, managerial or voluntary duties.
- Implementation of this guideline is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guideline, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity, and foster good relations. Nothing in this guideline should be interpreted in a way which would be inconsistent with compliance with those duties.

Implementation of the Guideline

Description of Implementation Strategy

National Institute for Health and Care Excellence (NICE) guidelines can help:

 Commissioners and provide 	rs of National H	lealth Service (NHS)	services to meet the requirement	nts of the NHS outcom	es framework
2013–14	. This inc	eludes helping them to	deliver against domain 1: prev	enting people from dying	g prematurely.
 Local health and wellbeing t 	oards to meet t	he requirements of the	Health and Social Care Act (2	2012)	and the
Public health outcomes fram	ework for Engla	and 2013–16			
 Local authorities, NHS serv 	ices and local or	rganisations determine	how to improve health outcor	nes and reduce health in	equalities during the
joint strategic needs assessn	ent process.		•		
NICE has developed tools		to help organisation	ns put this guideline into practic	e (see also the "Availab	ility of Companion
Documents" field).					
Implementation Tools					
Clinical Algorithm					
Resources					
For information about availability	, see the Availa	bility of Companion	Documents and Patient Reso	ources fields below.	

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Staying Healthy

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

National Institute for Health and Care Excellence (NICE). Maintaining a healthy weight and preventing excess weight gain among adults and children. London (UK): National Institute for Health and Care Excellence (NICE); 2015 Mar 13. 55 p. (NICE guideline; no. 7).

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2015 Mar 13

Guideline Developer(s)

National Institute for Health and Care Excellence (NICE) - National Government Agency [Non-U.S.]

Source(s) of Funding

National Institute for Health and Care Excellence (NICE)

Guideline Committee

Public Health Advisory Committee (PHAC)

Composition of Group That Authored the Guideline

Membership of the Public Health Advisory Committee (PHAC) A

Chair: Susan Jebb, Professor of Diet and Population Health, University of Oxford

Core Members: Mireia Jofre Bonet, Professor in Economics, City University London; Alison Lloyd, Community member; Chris Packham, Associate Medical Director, Nottinghamshire Healthcare NHS Trust; Toby Prevost, Professor of Medical Statistics, King's College London; Joyce Rothschild, Independent Education Consultant; Amanda Sowden, Deputy Director, Centre for Reviews and Dissemination, University of York; Lucy Yardley, Professor of Health Psychology, University of Southampton

Topic Members: Peymane Adab, Professor of Public Health and Epidemiology, University of Birmingham, Louisa Ells, Reader in Public Health and Obesity, Teesside University; Nick Finer, Professor, Consultant Endocrinologist and Bariatric Physician, University College London Hospitals; Laura McGowan, Research Fellow, Institute for Global Food Security, Queen's University, Belfast; Bimpe Oki, Consultant in Public Health, Lambeth and Southwark; Sarah West-Sadler, Community member

Expert co-optees to PHAC: Nick Cavill, Specialist Advisor, Public Health England Obesity Team

Financial Disclosures/Conflicts of Interest

See Declarations of Interests in section 10 of the original guideline document for a list of declarations made by members of the Public Health Advisory Committee.

Guideline Status

This is the current release of the guideline.

This guideline meets NGC's 2013 (revised) inclusion criteria.

Guideline Availability

Electronic comicas Armilolale from the	National Institute for Health and Care Excellence (NICE) Web site	
Electronic cobles. Available from the	National institute for mealth and Care excellence (INTCE) web site	

Availability of Companion Documents

The	following	are	available:
TIL	TO HO WILLS	z arc	avallatic.

Johnson L, Sebire S. Evidence review 1: an evidence review of modifiable diet and physical activity components, and associated
1.1. T. 1. (IIIV.) D. 1.1.1.2014.1.1.100 EL. (1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1
behaviours. London (UK): Bazian Ltd; 2014 Jul. 192 p. Electronic copies: Available from the National Institute for Health and Care
Excellence (NICE) Web site
Evidence review 1: appendices A-D. London (UK): Bazian Ltd; 2014. 49 p. Electronic copies: Available from the NICE Web site
Evidence review 1: appendix F. Evidence tables. London (UK): Bazian Ltd. 2014. 251 p. Electronic copies: Available from the NICE Web site
Johnson L, Sebire S. Evidence review 2: qualitative evidence review of the most acceptable ways to communicate information about
individually modifiable behaviours to help maintain a healthy weight or prevent excess weight gain. London (UK): Bazian Ltd; 2014 Jul. 101
p. Electronic copies: Available from the NICE Web site
• Evidence review 2: appendix E. Evidence tables. London (UK): Bazian Ltd; 2014. 13 p. Electronic copies: Available from the NICE Web site
Maintaining a healthy weight and preventing excess weight gain among children and adults: evidence statements. London (UK): National
Institute for Health and Care Excellence (NICE); 2015 Mar. 56 p. Electronic copies: Available from the NICE Web site
Maintaining a healthy weight and preventing excess weight gain among adults and children. Cost effectiveness considerations from a
population modeling viewpoint. London (UK): National Institute for Health and Care Excellence (NICE); 2015 Mar. 12 p. Electronic
copies: Available from the NICE Web site
Maintaining a healthy weight and preventing excess weight gain among adults and children. Costing statement. London (UK): National Institute for Health and Care Excellence. 2015 Mar. (NICE guideline; no. 7). Electronic copies: Available from the NICE Web site
• Maintaining a healthy weight and preventing excess weight gain among adults and children. Baseline assessment. London (UK): National
Institute for Health and Care Excellence. 2015 Mar. (NICE guideline; no. 7). Electronic copies: Available from the NICE Web site
Maintaining a healthy weight and preventing excess weight gain among adults and children. Equality impact assessment. London (UK):
National Institute for Health and Care Excellence. 2015 Mar. 13 p. (NICE guideline; no. 7). Electronic copies: Available from the NICE
Web site
The guidelines manual 2012. London (UK): National Institute for Health and Care Excellence (NICE); 2012 Nov. Electronic copies:
Available from the NICE Web site

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI Institute on May 26, 2015.

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